

## **Go West My Class: Geography Education On The Road Again (as in the information superhighway)**

A lesson on the impact of Geography on where we choose to live and introduction to applications of GIS

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**GRADE LEVEL:** 9-12

**CLASS:** World Regional Geography (elective)

### **National Standards**

*Standard 1:* How to use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective.

*Standard 2:* How to use mental maps to organize information about people places, and environments in a spatial context.

*Standard 3:* How to analyze the spatial organization of people, places, and environments on Earth's surface.

*Standard 6:* How culture and experience influence people's perceptions of places and regions.

*Standard 8:* The characteristics and spatial distribution of ecosystems on Earth's surface.

*Standard 9:* The characteristics, distribution, and migration of human populations on Earth's surface.

*Standard 11:* The patterns and networks of economic interdependence on Earth's surface.

*Standard 12:* The processes, patterns, and functions of human settlement.

*Standard 18:* How to apply geography to interpret the present and plan for the future.

### **Illinois State Standards**

*17.A.4a* Use mental maps of physical features to answer complex geographic questions (e.g., how physical features have deterred or enabled migration).

*17.A.4b* Use maps and other geographic instruments and technologies to analyze spatial patterns and distributions on earth.

**Purpose:** Introduce students to GIS and its possible use in our daily lives and also see how geography affects our choices in where we choose to live

**OBJECTIVE:** By the end of the project, students will be able to

1. Find data that can be mapped on the Factfinder Web page
2. Analyze the data from the web site
3. State recommendations on whether a person should live in Illinois or not based on their preferences.

**TIME FRAME:** 30 minutes a day for 4 days and 45 minutes on a 5th and final day for a 90 minute block schedule and condense as you wish for a 50-55 minute schedule.

**MATERIALS:** Internet computer

- Pen and pencil
- Project Handout
- Printer with lots of paper
- Materials to help students make a visual (markers, paper, etc.)

**Day 1**

Step 1: Present a simple powerpoint presentation on what GIS is about, and what its applications can do for us towards the end of class.

**Day 2**

*Step 1:* To begin the project ask students if they could live anywhere in the U.S. where would it be? Write down their responses on the board. Then ask how do they know that the place they mentioned is the best place for them to live? If the discussion dies, or no one hits a response that involves research, bring up the point that we don't know until we have written down our likes and dislikes and compared them to the geography of the place we want to live. This is where GIS can help us discover the best places to live, work, vacation, or go to college or other schooling. Without GIS we probably would be shooting in the dark and hoping that we hit the target we desire.

*Step 2:* Hand out project description with the client's characteristics.

*Step 3:* After discussing the project goals with the students and answering questions, have the students in each group pick a state out of a hat and write down the name of the state on their project packet.

*Step 4:* Allow the students time to research the topography of the States and the Climates using in class atlases or go to <http://nationalatlas.gov/natlas/natlasstart.asp> and look up the information there.

**Day 3**

Step 1: Go to a computer lab and get on the internet and type in <http://factfinder.census.gov/servlet/BasicFactsServlet>

- Click on "Maps" in the upper right of the screen and wait a moment
- Click on "age" by "show me" and change it to "Children (1990)"
- By the "for" category click and make sure the box says "United States by State"
- Then click on "Go" and wait for the map to appear.
- If you want to save the map for your report, click and hold down the mouse and drag the arrow over the map until the map is highlighted, and then let go. Then go up to "edit" and click on copy. Then open up a word document and paste it in it.
- Make notations on which are the same and which are different and your choice for your client.
- Repeat the above steps for the following topics in the "for" box
  - i. "Education (1990)"
  - ii. "Income (1990)"
  - iii. "Urban/Rural (1990)"

**Day 4**

Step 1: Allow them time to type their report for their client justifying their choice for their residency and Create a visual conveying and supporting their choice for their client all with the aid of a writing and visual rubric.

**Day 5**

Step 1 Have students present their findings from their research and their visual aids and they will turn in paper and visual

Name \_\_\_\_\_ Western State  
\_\_\_\_\_

**Go West My Class  
Or  
Geography Education On The Road Again (as in the information superhighway)**

A lesson on the impact of Geography on where we choose to live

**Background:** You and your partner are employed by the Illinois housing placement agency (IHPA). Illinois residents contact this agency to find out if Illinois is the best place to live or is there a state out west that better suits their interests and wants.

**Product:** By the end of this exercise you and your partner will create:

1. A typed report prepared especially for your client that describes the differences and similarities between the two states and which state you recommend to your client and why. (2 – 3 pages typed double spaced, it should be longer with graphics)
2. (A) Visual(s) that describes the differences between the two states
3. A presentation to the class on who your client was and what your recommendation is and why.

*Step 1:* You and your partner must pick a client from a hat. The choices are:

1. Gloria Garden – wants to live on flat level land so she will have no problems planning her garden. She wants to live in a climate that rains a lot, She wants to find a job teaching children, She hopes to go on for her Masters, she likes the country life, and money doesn't matter to her as long as she is doing what she loves.
2. Fred Fisherman – wants to live in a states with lots of lakes, and the climate has to be wet to keep those lake levels up, he dislikes children, he never went to college, he hates the city life, and he wants to open up a bait shop and live off the profits.
3. Steve Skier – needs to live in a hilly/mountainous terrain, he would love the weather to be cold all year, he plans on teaching children how to ski, he has a bachelor's degree, he loves being around people, and he hopes to open his own ski resort and make as much money as possible so he can ski more and work less.
4. Billy Boatman – loves all sorts of boating, canoeing and whitewater rafting, he loves water and loves the rain, he doesn't like to be around children, he wishes to become a Professor of boating, he doesn't like being around people, and he hopes to make \$30,000 or more during the first year.
5. Charlie Cycle – needs to train for the Tour de France so he needs to bike on flat, hilly, and mountainous terrain, he needs to train from January to June so the weather needs to

cooperate during that time period, he loves children, he never went to college, he needs to train away from populated areas, and he needs friends and corporations to donate money to help him train for the big race.

*Step 2:* You and your partner will now pick a state west of Illinois out of a hat. This is the state that you will compare to Illinois. You will compare the following features:

1. Topography – what landforms and bodies of water do the states have in common and what is different, and which would best suit the needs of your client?
2. Climate – Do the states have any similar climates, if so what are they, what climates are different, and which state would best suit the needs of your client?
3. Number of Children – what is the difference between the two states in their child population s and which state would better suit your client?
4. Education of population – What is the percentage of the state population with a Bachelor’s degree or higher and which state would better suit your client?
5. Rural/Urban population – What percentage of the population lives in an urban area and which state would best suit your client
6. Income – What is the median income of the population in the two states and which would better suit your client.

*Step 3:* Using your textbook and classroom atlases look at the topographical and Climate similarities between the two states. Make notations on which are the same and which are different and your choice for your client.

*Step 4:* Go to a computer and get on the information super highway and type in <http://factfinder.census.gov/servlet/BasicFactsServlet>

- Click on “Maps” and wait a moment
- Click on “age” by “show me” and change it to “Children 1990”
- By the “for” category click and make sure the box says “United States by State”
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- Repeat the above steps for the following topics in the “for” box

- i. “Education 1990”
- ii. “Income 1990”
- iii. “Urban/Rural 1990”

*Step 5:* Type your report for your client justifying your choice for their residency and create a visual conveying and supporting your choice for their client all with the aid of a writing and visual rubric.

